

NAME P/N QTY	FAILURE MODE & CAUSES	CRIT	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
WATER INLET FILTER ITEM 176 ----- SV821918-1 (1)	176FM01 Filter screen clogs. Excessive contamination in water reservoir fill/drain line.	2/2	END ITEM: Blocked passageway from the vehicle water tanks to the EMU water tanks. GPE INTERFACE: Inability to fill and/or drain EMU water tanks during recharging. MISSION: Loss of water supply for sublimator consumption. Terminate pre- EVA prep, loss of use of EMU. CREW/VEHICLE: None. TIME TO EFFECT /ACTIONS: Minutes. TIME AVAILABLE: N/A TIME REQUIRED: N/A REDUNDANCY SCREENS: A-N/A B-N/A C-N/A	A. Design - Pressure across the 38 micron screen is low normally (0.030 psid). The filter is a pleated wire mesh weave constructed of AISI 316L corrosion resistant steel and is welded into a two-piece AISI 304L housing. This corrosion resistant steel construction minimizes potential corrosion particles generation. B. Test - Component Acceptance Test: None. PDA Test: None. Certification Test: Certified for a useful life of 15 years (ref. EMU1-13-046). C. Inspection - A cleanliness level of HS3150 EM150 is maintained during assembly and testing of the filter. This cleanliness level requires a mandatory inspection for verification. D. Failure History - None. E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, Water Servicing, Leakage and Gas Removal. None for EET processing. F. Operational Use - Pre-EVA: Troubleshoot problem and if no success, consider use of third EMU. Terminate EVA prep. Training: Standard EMU training covers the failure mode. Operational Considerations: Generic EVA Checklist, JSC-48023, procedures Section 3 (EMU Checkout) and 4 (EVA Prep) verify hardware integrity and systems operational status prior to EVA.

EXTRAVEHICULAR MOBILITY UNIT
SYSTEMS SAFETY REVIEW PANEL REVIEW
FOR THE
I-176 WATER INLET FILTER
CRITICAL ITEM LIST (CIL)

EMU CONTRACT NO. NAS 9-97150

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